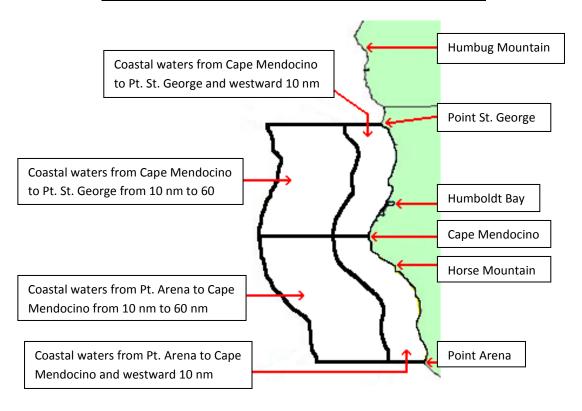
## **Glossary**

# National Weather Service—Eureka, CA



### Watch/Warning/Advisory Definitions:

**Small Craft Advisory for Winds**—Sustained winds of 21 to 33 knots or gusts lasting for greater than 2 hours over at least half of the marine zone are expected or occurring. Wave heights will remain lower than small craft advisory criteria.

**Small Craft Advisory for Hazardous Seas**—Waves are potentially hazardous due to height and period (see wave chart below) are expected or occurring. Wind speeds will remain lower than small craft advisory criteria.

Small Craft Advisory—Conditions for both winds and hazardous seas are expected or occurring at the same time.

**Gale Watch**—Gale force winds are possible within the next 12 to 48 hours, but its occurrence, location, and/or timing is still uncertain.

**Hazardous Seas Watch**—Very steep seas due to height and period (see wave chart below) are possible within the next 12 to 48 hours, but its occurrence, location, and/or timing is still uncertain.

**Gale Warning**—Sustained winds of 34 to 47 knots (39 to 54 mph), or frequent gusts for greater than 2 hours over at least half of the marine zone are forecast within the next 36 hours or currently occurring.

**Hazardous Seas Warning**—Very steep seas due to height and period (see wave chart below) are forecast within the next 36 hours or currently occurring.

**Storm Watch**—Storm force winds are possible within the next 12 to 48 hours, but its occurrence, location, and/or timing is still uncertain.

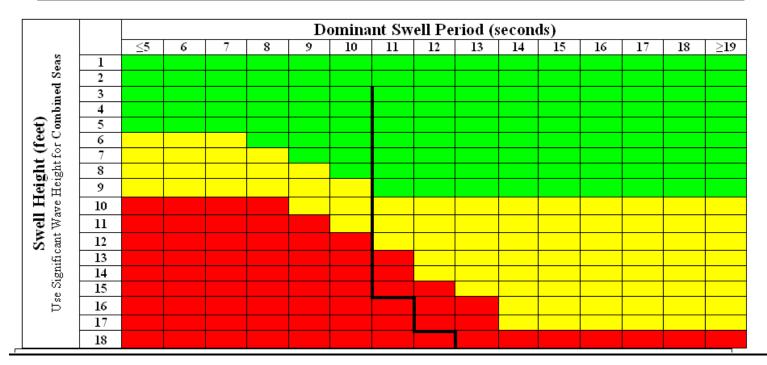
**Storm Warning**—Sustained winds of 48 to 63 knots (55 to 73 mph), or frequent gusts for greater than 2 hours over at least half of the marine zone are forecast within the next 36 hours or currently occurring.

**Hurricane Force Wind Watch**—Hurricane force winds are possible within the next 12 to 48 hours, but its occurrence, location, and/or timing is still uncertain.

**Hurricane Force Wind Warning**—Sustained winds or gusts of 64 knots (74 mph) or greater forecast within the next 36 hours or currently occurring.

## Eureka Hazardous Seas Warning and Advisory Criteria Worksheet

|  | Warning > Wind Waves > 9 feet. Or Swell falls in red.   |
|--|---|
|  | ${f Advisory}$ $\geq$ Wind Waves 6 to 9 ft. ${f Or}$ Swell falls in yellow area.              |
|  | ${f None}$ ${m >}$ Wind Waves less than 6 feet, ${f AND}$ Swell falls in green area of chart. |



#### **Marine Terms:**

**Bar**—short for "sand bar" but generally refers to the hazardous area associated with harbor entrances that are associates with shallow water, strong tidal and/or river currents, and large waves.

**Crest**—The highest part of a wave.

**Coastal Waters**—the marine forecast zone that extends from the shore to 60 nautical miles from the shore.

**Coastal Waters Forecast (CWF)**—The marine forecast for the **Coastal Waters**.

**Combined Seas**—Generally referred to as SEAS. Used to describe the combination or interaction of wind waves and swells in which the separate components are not distinguished. This includes the case when swell is negligible or is not considered in describing sea state. When used, SEAS should be considered as being the same as the significant wave height.

**Mixed Swell**—Two or more swells coming from different directions or from the same direction with different periods.

**Small Craft**—There is no precise definition for small craft. Any vessel that may be adversely affected by Small Craft Advisory criteria should be considered a small craft. Other considerations include the experience of the vessel operator, and the type, overall size, and sea worthiness of the vessel.

**Swell**—Wind-generated waves that have travelled out of their generating area. Swells that were generated far away will exhibit smoother, more regular and uniform crests and a longer period than wind waves. Locally generated swells can be very steep though.

**Swell Direction**—The direction from which the swells are propagating.

**Trough**—The lowest part of a wave.

**Wave Height**—Distance from wave trough to wave crest.

**Wave Period**— Time, in seconds, between the passage of consecutive wave crests past a fixed point.

**Wave Spectrum**—The distribution of wave energy with respect to wave frequency or period. Wave spectra assist in differentiating between wind waves and swell.

**Wave Steepness**—The ratio of wave height to wavelength and is an indicator of wave stability. When wave steepness exceeds a 1/7 ratio; the wave typically becomes unstable and begins to break.

**Wavelength**—Distance between crests or troughs of a wave.

**Wind Waves**—Local, short period waves generated from the action of wind on the water surface (as opposed to swell).